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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,528	04/15/2004	Cheng Shen	SP-1283	8389
44388	7590	06/29/2006	EXAMINER	
SOLAE, LLC P. O. BOX 88940 ST. LOUIS, MO 63188			WEIER, ANTHONY J	
			ART UNIT	PAPER NUMBER
			1761	
DATE MAILED: 06/29/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/825,528

Applicant(s)

SHEN ET AL.

Examiner

Anthony Weier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006 and 21 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5,6 and 10-83 is/are pending in the application.
- 4a) Of the above claim(s) 17-83 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,6 and 10-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claims drawn to an invention nonelected with traverse in the paper filed 10/19/05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 5, 6, and 10-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, the original specification supports the slurry not being subjected to spray drying (page 8, lines 28 and 29) and not just the protein as now set forth in instant claim 1.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 5, 6, and 10-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Shen (U.S. Patent Application No. US 20040258827).

Shen discloses an acidic beverage comprising a blend of a hydrated protein stabilizing agent (e.g. pectin and high methoxyl pectin; 0.5%) with acid (e.g. ascorbic) to provide a first component with a pH of 2-5.5 with a hydrated protein material (e.g. hydrolyzed soy protein isolate) having a solids content of up to 10%, said blend having a pH as called for (e.g. pH 3.8), wherein said blend having the particular ratios of the various components as called for in the instant claims (see paragraphs 28, 34, and 38-43).

6. Claims 1, 5, 6 and 10-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang (U.S. Patent No. 6887508).

Huang discloses an acidic beverage wherein a soybean protein isolate is hydrated, blended with a solution including high methoxyl pectin (e.g. 0.35% and pH of 3), wherein said acidic beverage is pH adjusted with, for example, citric acid to 3.85 pH.

7. Claims 1, 5, 6 and 10-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Patel et al (U.S. Patent No. 6811804).

Patel et al discloses a process of preparing an acidic beverage wherein a soybean protein isolate is hydrated, blended with a solution including high methoxyl pectin (about 2%), pH adjusted with, for example, citric acid to 4 pH.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 5, 6, and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shen (U.S. Patent Application No. US 20040258827) or Huang et al taken together with Hoer et al.

If it is shown that upon drying the Shen, Patel et al, or Huang protein by conventional means as set forth therein, same would not always retain the particular functionality attained in the instant invention, the following should be noted. However, it is known to dry soy protein in such manner that functionality is retained as set forth, for example, in Hoer et al (col. 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to have adopted the drying procedure in Hoer et al to provide a dried protein having better functionality.

10. Claims 1, 5, 6, and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong (U.S. Patent Application No. US 2005/0202147).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject

matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Wong et al discloses an acidic beverage comprising a blend of a hydrated protein stabilizing agent (e.g. pectin) with acid (e.g. ascorbic) to provide a first component with a hydrated protein material (e.g. hydrolyzed soy protein isolate) having a solids content of up to 10% and the amount of stabilizing agent as called for in the instant claims, said blend having a pH as called for (e.g. pH 3.8) (see paragraphs 1 and 89-101; claims 24 and 25).

Wong et al is silent regarding the pH of the combination of the hydrated protein stabilizing agent and acid. However, such determination would have been well within the purview of a skilled artisan, and, absent a showing of unexpected results, it would have been further obvious to have arrived at such pH value as a matter of preference.

The claims further call for the pectin used to be a high methoxyl pectin. High methyl pectin is a commercially well known form of pectin that has been used as a protein stabilizing agent as taught, for example, in Huang (see claims). It would have been obvious to one having ordinary skill in the art at the time of the invention to have

employed same as matter of preference depending on, for example, cost and availability.

11. Claims 1, 5, 6, and 10- 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Klavons et al (U.S. Patent No. 5286511).

Klavons et al discloses a product wherein pectin (approximately 1%) is added to an acidic solution (includes citric acid) and hydrated, eventually resulting in a pH of 3.7, wherein said pectin/acidic solution is subsequently blended with a hydrated protein material (e.g. soybean protein isolate; col. 2, lines 27-32; Examples; claims 6-9). results, it would have been obvious to one having ordinary skill in the art at the time of the invention to have arrived at such values through experimental optimization.

The claims further call for the pectin used to be a high methoxyl pectin. High methyl pectin is a commercially well known form of pectin that has been used as a protein stabilizing agent as taught, for example, in Huang (see claims). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed same as matter of preference depending on, for example, cost and availability.

The claims further call for the particular solids content in the slurry. However, such determination would have been well within the purview of a skilled artisan, and it would have been further obvious to have arrived at same as a matter of preference depending on the particular aesthetic appearance desired in the final product.

Klavons et al further discloses said resulting beverage having a pH of 2-6. It would have been further obvious to have arrived at a pH within this range (as called for in the instant claims, e.g. pH 3.8) as a matter of preference.

### ***Conclusion***

12. Applicant's arguments filed 4/11/06 have been fully considered but they are not persuasive.

Applicant argues that Shen, Huang, and Patel et al disclose products wherein the soy protein used therein has been dried contrary to the instant claims call for said protein not being subjected to spray drying. Applicant further argues that spray drying of the protein would result in same having less functionality than if left in a liquid form. Although such arguments pertain to a method step, the instant rejected claims are drawn to products. It should be noted that Applicant has not provided any direct evidence to support the assertion that the proteins of Shen, Huang, and Patel et al are spray-dried and that such spray-drying treatment would result in a protein and final product containing said protein that differs in functionality (due to said spray drying or any drying for that matter) to such an extent as to provide a product falling outside the scope of the instant claims. Nevertheless, Shen does not disclose how the proteins are dried beyond saying drying is accomplished by conventional means (paragraph 30). Likewise, Huang and Patel et al do not restrict the method of drying same. There are various methods for drying including air drying which are less destructive to the functionality of the protein than spray drying, and it has not been shown that the functionality of the Shen, Huang, or Patel et al products have been compromised to a



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different degree as the instant product. Nevertheless, it would have been obvious to one having ordinary skill in the art to have dried said protein in such a way as to retain excellent functionality as set forth, for example, in Hoer et al as discussed above.

Applicant further argues that Klavons et al employs a different method in preparing the product. However, it should be noted that the instant claims under consideration are product claims. Even considering the differences in order of steps, it is not seen where same would provide for a different product falling outside the scope of the instant claims as presently recited. Applicant further argues that the instant invention is not subjected to spray-drying conditions wherein it is asserted that the protein would vary in functionality as a result. However, Klavons et al also does not spray dry the protein therein. In fact, Klavons et al is silent regarding drying of said protein in general.

***Terminal Disclaimer***

13. The application/patent being disclaimed has been improperly identified as the instant case. The correct number intended appears to be 10/797442 (related to Patent Application Publication No. US2005/0202147 to Wong et al).

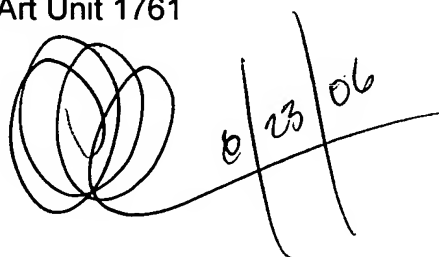
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony Weier  
June 23, 2006

Anthony Weier  
Primary Examiner  
Art Unit 1761

A handwritten signature consisting of several overlapping loops, followed by a vertical line and the date "6/23/06" written in a cursive style.